



## 37U Series DFK 37AUX178

- IMX178 CMOS STARVIS Sensor
- 6.3 MP
- USB3 Vision / UVC compliant
- Trigger and I/Os
- C/CS mount



The 37U series camera DFK 37AUX178 with a Sony IMX178 sensor delivers 60 frames per second with a resolution of 3072x2048 (6.3 MP).

37U Series: Featuring a range of Sony and onsemi sensors with resolutions up to 12MP, these cost-optimized, single-board industrial cameras are available in several form factor variants, providing a flexible customization concept for systems engineers and OEMs. These streamlined, standard-feature cameras offer a reduced hardware footprint with USB-C connector and optional hardware trigger and I/Os.

The USB3 Vision standard allows for rapid integration into new and existing applications via The Imaging Source's [IC Imaging Control 4 SDK](#) as well as most other third-party image processing libraries.

Note: This Data Sheet is intended to provide a summary overview for an individual camera model. The Imaging Source's website also offers information on spectral sensitivity, dimensional diagrams, sensor data sheets, STEP files as well as our full product catalog. For comprehensive technical information, please refer to the Technical Reference Manual specific to each camera model.

[www.theimagingsource.com](http://www.theimagingsource.com)



## 1 Quick Facts

| General                       |                             |
|-------------------------------|-----------------------------|
| Vision Standard               | USB3 Vision (UVC compliant) |
| Dynamic Range                 | 12 bit                      |
| Resolution                    | 3072x2048                   |
| Frame Rate at Full Resolution | 60                          |

| Optical Interface |                   |
|-------------------|-------------------|
| IR-Cut filter     | Yes               |
| Sensor Type       | Sony IMX178LQJ-C  |
| Shutter Type      | Rolling           |
| Sensor Format     | 1/1.8 inch        |
| Pixel Size        | 2.4 $\mu\text{m}$ |
| Lens Mount        | C/CS              |

| Electrical Interface |                       |
|----------------------|-----------------------|
| Interface            | USB 3.1gen1           |
| Supply Voltage       | 4.75 VDC to 5.25 VDC  |
| Current Consumption  | approx 320 mA @ 5 VDC |

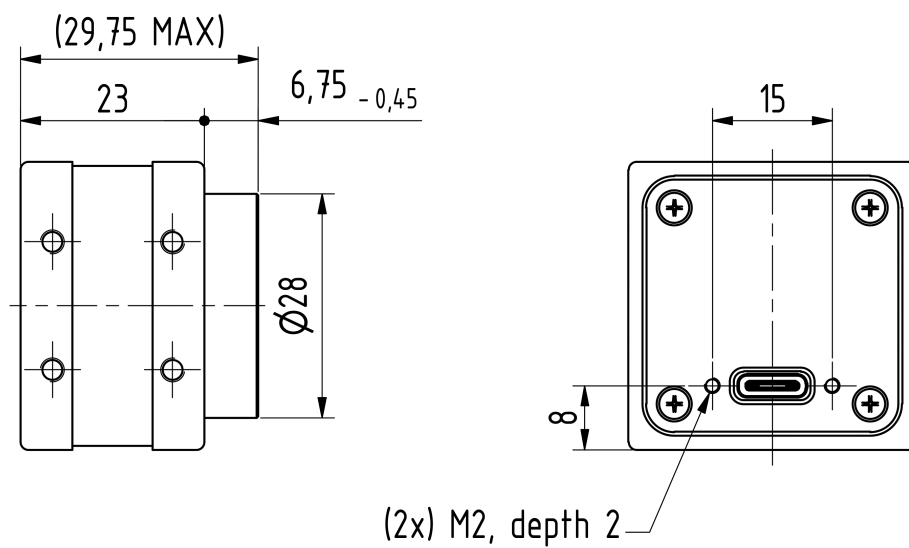
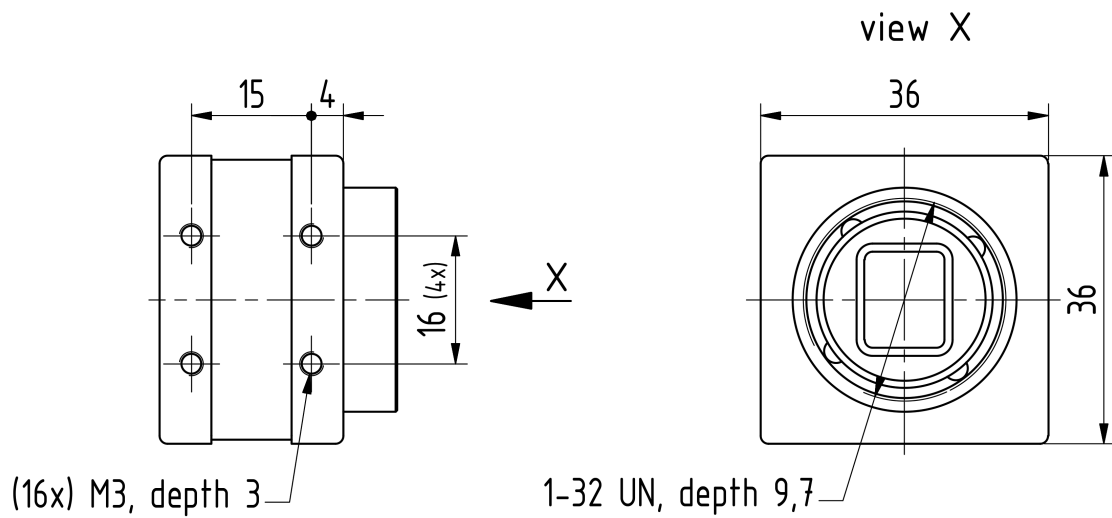
| Mechanical Data |                              |
|-----------------|------------------------------|
| Dimensions      | H: 36 mm, W: 36 mm, L: 25 mm |
| Mass            | 70 g                         |

| Environmental Conditions        |                               |
|---------------------------------|-------------------------------|
| Housing Temperature (operating) | -5 °C to 50 °C                |
| Temperature (storage)           | -20 °C to 80 °C               |
| Humidity (operating)            | 20 % to 80 % (non-condensing) |
| Humidity (storage)              | 20 % to 95 % (non-condensing) |



## 2 Dimensional Diagrams

### 2.1 DFK 37AUX178 C-Mount without Tripod Adapter



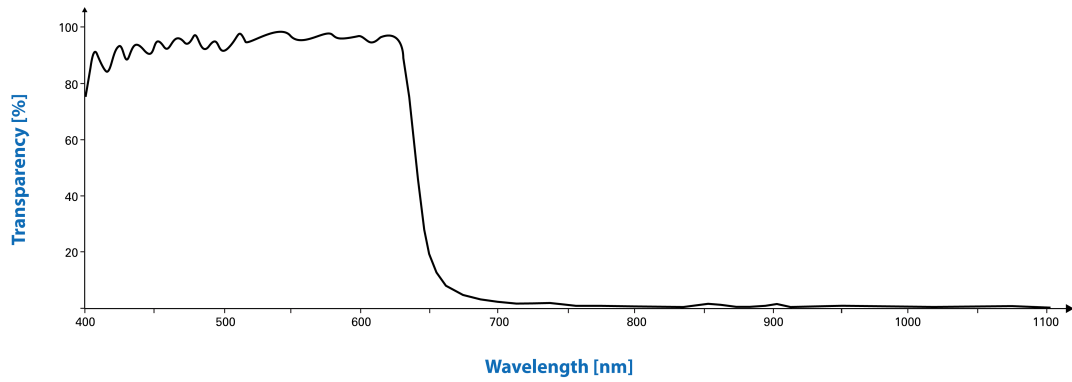
Dimensions: mm  
Tolerances: DIN ISO 2768-f





## 3 Spectral Characteristics

### 3.1 IR-Cut Filter



### 3.2 Spectral Sensitivity - IMX178LQJ-C

Sensor: Sony IMX178 - courtesy of Sony Deutschland GmbH

